TOWARDS A WIRELESS POST-OPERATIVE PAIN DIARY SUPPORT SYSTEM FOR YOUTH WITH ACUTE POST-OPERATIVE PAIN: A USER-CENTRED DESIGN STUDY AND CONSENSUS CONFERENCE

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INTRODUCTION / AIM

This study explores the pain self-management needs of youth with acute post-operative pain from the perspective of patients, parents, and healthcare professionals (HCP), to inform development of the My Post-Operative Pain (MyPoP) smartphone application.

METHODS

In Phase 1, a qualitative study design was used with a convenience sample of patients (n=14), parents (n=13) and HCPs (n=15). Two iterative cycles of audio-recorded semi-structured individual interviews were conducted with patients and parents. In addition, two separate semi-structured focus groups were conducted with HCPs (n=15). Interview data was transcribed verbatim and descriptive statistics and simple content analyses were used to organize data into emerging themes. In Phase 2, a two-day consensus conference was held with experts in pediatric pain and surgery (n=13), to inform development of the pain tracking survey and clinical decision support system (CDSS) for the smartphone application.

RESULTS

In Phase 1, all study participants were presented with questions regarding main smartphone application functions: (1) tracking pain, (2) goal setting, and (3) pain self-management toolbox. Participants reported all three functions as important to pain management, with additional comments regarding realistic goals, the ability to track medication use, and a customizable and user-friendly interface. In Phase 2, experts identified four key daily tracking questions and specified treatments for the pain CDSS function.

DISCUSSION / CONCLUSIONS

Patients, parents and HCPs believe the MyPop smartphone application is a promising avenue to improve accessibility and availability of self-management strategies for acute post-operative pain. Next steps will be to develop and test the usability of the application.

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